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The tectonic evolution of Al-Daw Basin and its importance in terms of hydrocarbon potential in western and central Syria

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Seismic geophysical data and well logs, in addition to geological data from rock cores and stratigraphic columns were used, to study and understand the tectonic development of the AL-Daw Basin region in central and western Syria, with the aim of assessing hydrocarbon potential.

The study relied on the interpretation of a wide network of 2D seismic profiles (5500 linear km), supported with 3D seismic cubes in the areas of oil and gas discoveries, which contribute to understand the AL-Daw basin evolution as it considers extend of the Palmyra basin in central Syria.

Well correlation have been carried out between the wells drilled along the basin and the adjacent areas for stratigraphic linking and to build a more accurate picture of the region tectonics and its evolution, represented by a geological model and structural maps.

By examining the rock cores and studying the stratigraphic columns an accurate image emerged about the sedimentation environments and subsequent sedimentation processes, especially those samples that contain oil show and belong to the lower and middle Triassic ages.

The importance of Triassic formations are the salts layers that characterize the AL-Daw basin by forming strike-slip faults and flower's structure where they playing a significant role of forming hydrocarbon traps.

As a result, by analyzing and accumulating the studied data it's became clear that there are still great hopes for achieving more important hydrocarbon deposits, especially gas, in the AL-Daw Basin region.

References

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